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10/027,173	12/20/2001	Masayuki Yurimoto	7217/66127	9743

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COOPER & DUNHAM LLP
1185 Avenue of the America
New York, NY 10036

EXAMINER

NGUYEN, PHUNG

ART UNIT PAPER NUMBER

2632

DATE MAILED: 09/12/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/027,173

Applicant(s)

YURIMOTO ET AL.

Examiner

Phung T Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asami et al. [U.S. Pat. 6,252,520]

Regarding claim 1: Asami et al. disclose a mobile unit communication apparatus providing a relayed signal when error detected which comprises all subject matter as follows:

- a. detecting means for detecting position information of the transmitting vehicle (col. 2, lines 57-65);
- b. transmitting means for transmitting the position information and the alarm information (col. 3, lines 19-32);
- c. receiving means for receiving the position information and the alarm information transmitted from the transmitting vehicle (col. 3, lines 51-54);
- d. means for determining a current position of the receiving vehicle (col. 2, line 57-65);
- d. output means for outputting the alarm information to a user of the receiving vehicle (col. 3, lines 46-51); and
- e. control means for performing control the alarm information including means for calculating a distance between the receiving vehicle and the transmitting vehicle based on the current position of the receiving vehicle (col. 5, lines 12-22).

Asami et al. disclose the controller issuing a hazard alarm when the relative distance is shorter than the predetermined distance "b" (col. 5, lines 19-34) but do not directly disclose the predetermined distance less than an effective range of the transmitting means as claimed. However, since the hazard alarm of Asami et al. is only issued when the relative distance is shorter than the predetermined distance "b". This excludes other vehicles within the transmission range of the transmitter but outside of the effective range. Therefore, it would have been obvious to the one of ordinary skill in the art at the time the invention was made to readily recognize that the relative distance is a predetermined distance in order to generate the alarm.

Regarding claim 9: All the claimed subject matter is already discussed in respect to claim 1 above. Asami et al. also teach inputting means for inputting alarm information (col. 7, lines 62-67).

3. Claims 2, 3, 4, 8, 10-12, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asami et al. in view of Watanabe [U.S. Pat. 5,450,057].

Regarding claim 2: Asami et al. discloses the control means determines that the transmitting vehicle is present within the predetermined distance (col. 4, lines 29-55) except that the control means changes a direction of output of the alarm information from the output means according to a direction of the transmitting vehicle. However, Watanabe discloses a stereophonic warning apparatus comprising the controlling means controls an output level of each of the speakers 130 and 131 (figure 1, col. 1, lines 16-20 and lines 53-59, and col. 4, lines 10-30) according to the direction of the vehicle. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teaching of Watanabe in

the system of Asami et al. to change the direction of output of the alarm information in order to perceive the direction of the vehicle that has transmitted the alarm sound which is an advantage.

Regarding claim 3: Watanabe discloses the control means changes an output level of the alarm information from the output means according to a distance between the receiving vehicle and the transmitting vehicle (col. 4, lines 15-17).

Regarding claim 4: Watanabe discloses transmitting type information specifying a type of the alarm information; receiving type information; and changing the output of the alarm information from the output means according to the specified type of the alarm information (col. 1, lines 16-20, and col. 2, lines 51-57).

Regarding claim 8: Watanabe discloses transmitting a vehicle speed; receiving the vehicle speed; and the control means changes an output level of the alarm information according to the vehicle speed (col. 4, lines 10-15).

Regarding claim 10: Watanabe discloses calculating a direction of the second vehicle with respect to the first vehicle; and the output control means changes a direction of output of the alarm information according to the calculated direction (col. 4, lines 10-45).

Regarding claim 11: Watanabe discloses the output control means changes an output level of the alarm information according to the distance (col. 4, lines 15-17).

Regarding claim 12: All the claimed subject matter is already discussed in respect to claims 4 and 9 above.

Regarding claim 16: Watanabe discloses transmitting means adds a vehicle speed of the first vehicle to the alarm information; receiving means receives a signal including the vehicle

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speed from the second vehicle; and output control means changes the predetermined distance for determining according to the vehicle speed (col. 4, lines 10-45).

4. Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asami et al. in view of Watanabe and further in view of Sadler [U.S. Pat. 3,949,300].

Regarding claim 5: Watanabe discloses the type information specifying the type of the alarm information (col. 1, lines 53-59) but the combination fails to disclose the alarm information specifies at least a horn signal as claimed. However, Sadler discloses an emergency radio frequency warning device comprising the alarm information specifies at least a horn signal (col. 2, lines 20-34). Therefore, it would have been obvious to the skilled artisan to employ the alarm type (horn signal) of Sadler into the system of Asami et al. and Watanabe to reproduce the originating sound, thereby warning the driver of potential danger.

Regarding claim 13: Refer to claim 5 above.

5. Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asami et al. in view of Watanabe and further in view of Reeves [U.S. Pat. 6,211,778].

Regarding claim 6: Asami et al. disclose the radio warning signal is transmitted from the vehicle to any receivers that might be operating within the predetermined distance (col. 4, lines 29-42). The combination does not show changing the predetermined distance according to the information specifying the alarm information as claimed. However, changing the predetermined distance according to the alarm information is known in the art as taught by Reeves (col. 3, lines 66-67, and col. 4, lines 1-14). Therefore, it would have been obvious to one of ordinary skill in

the art to use the teaching of Reeves into the system of Asami et al. and Watanabe to change the predetermined distance according to the alarm information because increasing the intensity of the audible warning as the distance between the transmitter vehicle and receiver vehicle decreases would allow the driver to advantageously sense the approach distance of the transmitter vehicle.

Regarding claim 14: Asami et al. discloses the radio warning signal is transmitted from the vehicle to any receivers that might be operating within the predetermined distance (col. 4, lines 29-42). The combination does not show changing the predetermined distance for determining according to the type of the alarm information as claimed. However, changing the predetermined distance according to the type of the alarm information is known in the art as taught by Reeves (col. 3, lines 66-67, and col. 4, lines 1-14). Therefore, it would have been obvious to one of ordinary skill in the art to use the teaching of Reeves into the system of Asami et al. and Watanabe to change the predetermined distance according to the alarm information because increasing the intensity of the audible warning as the distance between the transmitter vehicle and receiver vehicle decreases would allow the driver to advantageously sense the approach distance of the transmitter vehicle.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Asami et al. in view of Watanabe and Reeves and further in view of Hayashida et al. [U.S. Pat. 5,926,118].

Regarding claim 7: Reeves discloses changing the predetermined distance according to the alarm information as discussed in claim 6 above but the combination fails to disclose the predetermined distance according to a type of a road where the receiving vehicle is located. However, Hayashida et al. disclose a vehicular navigation apparatus comprising a predetermined

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distance may be set in accordance with the type of the currently traveled road (figure 10, col. 9, lines 35-47, and col. 10, lines 25-30). Therefore, it would have been obvious to the skilled artisan to use the technique of Hayashida et al. in the system of the combination to set the predetermined distance according to the type of a road in order to extend the use of the device.

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Asami et al. in view of Hayashida et al. [U.S. Pat. 5,926,118].

Regarding claim 15: Asami et al. do not disclose the predetermined distance according to a type of a road where the first vehicle is located. However, Hayashida et al. disclose a vehicular navigation apparatus comprising a predetermined distance may be set in accordance with the type of the currently traveled road (figure 10, col. 9, lines 35-47, and col. 10, lines 25-30). Therefore, it would have been obvious to the skilled artisan to use the technique of Hayashida et al. in the system of Asami et al. to set the predetermined distance according to the type of a road in order to extend the use of the device.

Response to Arguments

8. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Tang et al. [U.S. Pat. 5,572,449] disclose an automatic vehicle following system.

b. Izidon et al. [U.S. Pat. 5,325,302] disclose a GPS-based anti-collision warning system.

c. Koike [U.S. Pat. 6,445,308] discloses a positional data utilizing inter-vehicle communication method and traveling control apparatus.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phung Nguyen whose telephone number is (703)308-6252. The examiner can normally be reached on Monday to Friday from 8:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on 703-308-6730. The fax numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-308-9051 for After Final communications.

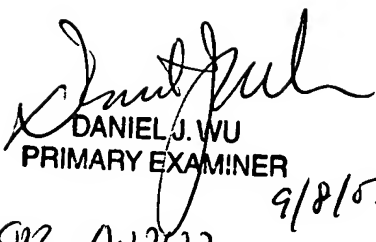
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

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Examiner: Phung Nguyen

Date: September 4, 2003


DANIEL J. WU
PRIMARY EXAMINER
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